

e-Infrastructures for an Engaging Science Classroom

Demonstration of innovative ways to involve teachers and students in eScience through the use of existing e-infrastructures in order to spark young people's interest in science and in following scientific careers.

The main objectives of the Discover the COSMOS project:

- Select a series of eScience initiatives that successfully introduce the scientific methodology in school science education.
- Systematic validate the proposed approaches and activities in order to identify their impact in terms of the effectiveness and efficiency.
- Integrate these initiatives under a common educational approach and develop the Discover the COSMOS
 Demonstrators that could be exploited and widely used from the educational communities in Europe and beyond.
- Design and implement a systematic raising awareness strategy.
- Implement the Discover the COSMOS
 Demonstrators at large scale in
 Europe, and organize a series of raising awareness activities that will introduce students and teachers to eScience
- Create virtual learning communities of educators, students and researchers.







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Discover the COSMOS promotes the field of e-science and supports the vision for the development of a more challenging science classroom environment through:

- access to research data and archives (e.g. data from CERN detectors, telescopes);
 - access and use of scientific instruments such as telescopes;
 - use of advanced tools for data acquisition and analysis;
- •presentation of computer models of objects, processes, or phenomena being studied;
- •remote and local communication and collaboration on scientific topics and data;
- flexible and commonly understandable instruments for authentic assessment of learning results.



